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NEW RIVER GORGE

NATIONAL RIVER / WEST VIRGINIA



RECOMMENDED:

Robert J. Kelley
Manager, Eastern Team, Denver Service Center

6/23/92
Date

Joe L. Kennedy
Superintendent, New River Gorge National River

9/26/91
Date

APPROVED:

Charles P. Clapper, Jr.
Acting Regional Director, Mid-Atlantic Region

6/16/92
Date



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Development Concept Plan

June 1992

**KAYMOOR
NEW RIVER GORGE NATIONAL RIVER • WEST VIRGINIA**

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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INTRODUCTION

BACKGROUND

This final *Development Concept Plan* (DCP) for the Kaymoor area of New River Gorge National River represents another step in the ongoing planning, management, and development process that is making New River Gorge a reality. The planning process began with the preparation of the national river's *General Management Plan* (GMP) in 1982, which provided a parkwide overview of resource management strategies and visitor activities. In 1988 the *Management and Development Guidelines* were prepared. That document updates the direction established by the GMP, sets the stage for more detailed planning, and establishes the philosophical framework for site-specific decision making. This final DCP for Kaymoor uses the resource management and visitor use strategies described in the GMP, as well as the philosophical framework of the *Guidelines* to establish those site-specific developments necessary to tell the story of mining within the New River Gorge.

The *Draft Study of Development Concept Alternatives/Environmental Assessment* (DCA/EA) for the immediate Kaymoor mine site was prepared in September 1990 and released for public review from November 26 to December 28, 1990. Alternative 1 was selected in the draft study as the National Park Service's preferred alternative. However, during the review period it became clear that there were some significant logistical, cost, and resource preservation issues related to the preferred alternative, which required a reevaluation of that alternative. To ensure that these concerns were addressed, in March 1991 the National Park Service reviewed the draft alternatives and began to explore additional design solutions. In May 1991 the decision was made by the regional director of the Mid-Atlantic Regional Office and the Kaymoor planning team to select alternative 2 as the proposed action.

Information included in this DCP is limited to that necessary to understand the final plan for Kaymoor. Detailed data regarding other alternatives can be found in the draft DCA/EA.

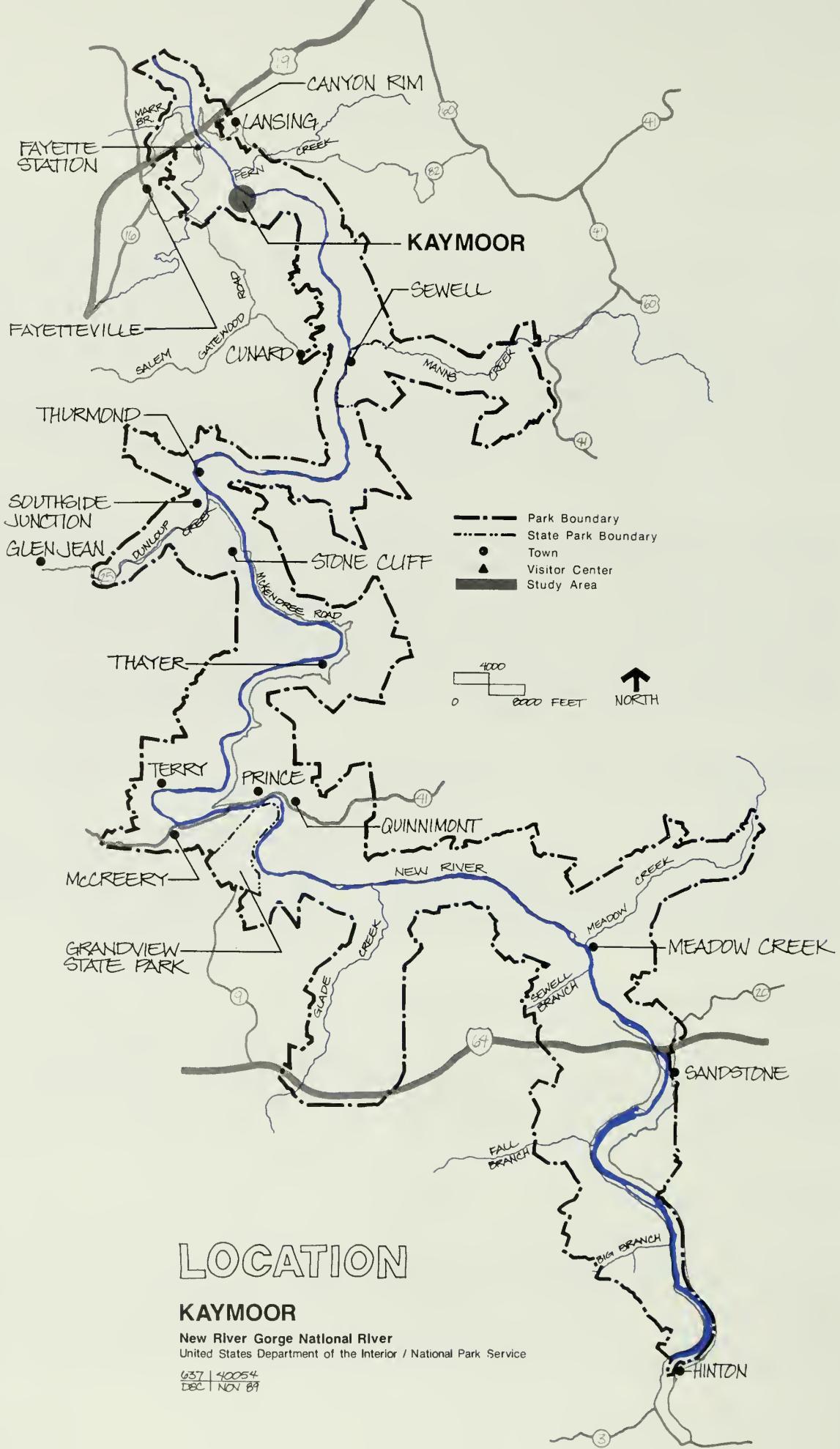
It was determined that the National Park Service's preferred alternative is not a major federal action significantly affecting the quality of the human environment as defined by the National Environmental Policy Act of 1969, nor is the proposed action without precedent or similar to one that normally requires an environmental impact statement. Therefore, an environmental impact statement will not be prepared. A *Finding of No Significant Impact* is included as appendix C.

ALTERNATIVES CONSIDERED BUT REJECTED

Three alternatives and the proposed action were originally considered in the draft DCA/EA. Alternative 1 was the original preferred alternative but was ultimately rejected for a variety of reasons. That alternative and the other two alternatives considered but rejected are described below with a short explanation of the reasons for nonselection.

Alternative 1

Alternative 1 included extensive restoration of building exteriors and stabilization of other structures not considered important in relating the Kaymoor story. Access would have been improved through construction of a modern "people mover" system that would allow visitors to ride from Kaymoor top to the bench level and then on down to Kaymoor bottom. All three levels would also have been linked with new foot trails and/or stairs. Overlook sites across the gorge in the Fern Creek Buttress area would also have been developed if and when the property became part of the New River Gorge



National River. These viewpoints would have offered opportunities to see Kaymoor from more remote locations. Active interpretive programs and operation of facilities at Kaymoor would have been seasonal as with all alternatives, although the site would have been accessible by foot year-round, and some in-place interpretive signs would have allowed self-guided exploration.

Despite its popularity with some of the public, this alternative was ultimately rejected for several reasons as stated below.

The people mover system could not be reconstructed and used for park or public use due to current safety requirements. This left the possibility of some other means of public conveyance from top to bottom, such as a funicular, which would have been a considerable modern intrusion on the site and an expensive system to operate and maintain for an approximately four- to five-month visitor season. The funicular would have had to be in almost the same location as the historic haulage to be effective for use by the elderly and visitors with disabilities because of the horizontal constraints of the topography. And this would have destroyed any remains of the historic haulage, which was considered unacceptable by the West Virginia State Historic Preservation Office, both for the loss of historic fabric and the visual intrusion it would cause on an essentially intact site.

The costs of construction (approximately \$6 million), maintenance (approximately \$2 million yearly), and operation (an additional 8 employees) were considered unacceptable for a five-month visitor season. In addition, a funicular would be an attraction in itself and thus could overshadow the historical importance of Kaymoor. A people mover system also has the potential to bring more people to Kaymoor than the site's resources could adequately handle, resulting in erosion of the site and overuse of the facilities. The results of public written comments indicated that the public was concerned about the impacts of this alternative. Of the 23 written responses, only nine respondents supported this alternative with the people mover system, although nearly all respondents approved of the site's preservation.

Alternative 3

Alternative 3 is similar to the new proposed action. It differs in the number of structures that would have undergone stabilization. Structures not stabilized would have been allowed to deteriorate and would have been removed if they became a danger to the public. Access to the site would have been more limited without the people mover, but the trail access would have been considerably upgraded for able-bodied visitors. Waysides would have provided the main site interpretation. An overlook across the gorge from Kaymoor would have been developed for primary viewing of Kaymoor through telescopes; interpretation of the site would have occurred primarily through waysides. This overlook would have been accessible to the elderly and visitors with disabilities, but it would have required a 3/4-mile walk to reach it from the parking area.

This alternative was rejected because there was little public support for it (only two written responses selected it as their preferred alternative); because the National Park Service does not own the property necessary to provide parking and the trail for the overlook, and probably will not own it anytime in the near future; and because the escarpment of the Endless Wall is an important peregrine hacking site that could be adversely affected by visitor use.

Alternative 4

The final alternative is the least extensive of the four alternatives and would have entailed stabilization or removal of structures only as necessary to protect visitors from hazards as the site

continues the process of natural deterioration. No other attempts to stop that process would have been undertaken. Hikers along the Mary Draper Ingles Trail would have discovered the ruins of Kaymoor, which would simply have been identified by interpretive signs. The site would eventually have been lost.

This alternative was rejected because there was no public support for it (no written responses selected it as their preferred alternative), and because the park would eventually lose significant historic structures and the opportunity to interpret the site.

ALTERNATIVE 2 - PROPOSED ACTION

The alternative described in this document was chosen as the proposed action because it allows for continued preservation and interpretation of the site as do alternatives 1 and 3, allows for better visitor access to the site than at present, allows current interpretive activities to continue, allows for a more reasonable increase in staffing and maintenance costs than either alternatives 1 or 3, prevents loss of significant structures through preservation maintenance (although no restoration as in alternative 1), and has a total development cost more in line with expected visitation and with the carrying capacity of the site than alternative 1.

PURPOSE OF AND NEED FOR THE PLAN

The 1982 *General Management Plan* for New River Gorge National River identified Kaymoor—a mine and company townsite—as a focal point for the interpretation of early coal mining technology in the New River Gorge. Since 1982 a substantial amount of research has confirmed Kaymoor's value as an important historic resource.

Measured field drawings by the Historic American Engineering Record (HAER) team have been completed, documenting the layout of the coal processing complex and illustrating the coal processing system at Kaymoor.

A detailed historic resource study on the Kaymoor mining operation and the social aspects of the two company towns within the complex has been completed by the DSC historian assigned to the joint DSC-HAER effort. These research efforts verify Kaymoor's important role as a coal mining complex and document its significance. The pattern of events that occurred at Kaymoor, such as the mine and town construction by outside industrialists, the innovative technical solutions to the problems of mining coal within the steep gorge landscape, the use of immigrant and black labor, the fierce struggle to keep out the United Mine Workers of America, the transition from hand loading to mechanical processing, and the legacy of a coal town society that influenced West Virginia history to a great extent, are all nationally significant because of the impact West Virginia coal mining had on the national scene in economic, social, industrial, and labor terms.

Even though the forces of gravity and weather have led to the deterioration of much of the historic fabric at Kaymoor, extant remains still evoke interest in the story of Kaymoor. The challenge at hand lies in protecting or enhancing what remains in this difficult environment, making the complex accessible to visitors, and interpreting those minimal remains in ways that bring the vitality of this once bustling area to life in the minds of modern visitors.

The following management objectives for New River Gorge National River relate to the Kaymoor site:

- Preserve coal mining, railroad, and other historic resources that best illustrate park significance.
- Develop a system of land- and water-based recreation opportunities that allow visitors to experience the park's resources to the extent that natural, cultural, and scenic values are not impaired.
- Work with the community to the extent possible to help it maximize economic benefits related to park development without impairing key resources.

This DCP outlining a plan of development for Kaymoor is a part of a larger emphasis by the National Park Service to identify and develop significant coal-related historic and cultural resources in southern West Virginia in cooperation with the West Virginia State Historic Preservation Office. Other areas currently undergoing study or development by the National Park Service include the town of Thurmond, the former Grand View State Park, and Bramwell-Pocahontas (straddling the border between Virginia and West Virginia). The West Virginia State Historic Preservation Office is currently inventorying other resources in the 11-county area that could significantly contribute to the economic development of the state.

DESCRIPTION OF THE ENVIRONMENT

HISTORICAL CONTEXT

Fayette County, West Virginia, is famous for its abundant natural resource—coal. Blessed with thick seams of "smokeless" coal, Fayette County has made its living through the mining of the 2- to 5-foot seams of 70% carbon coal present in the New River coalfield. The history of Kaymoor coal mine no. 1, located on the New River within this famous coalfield, is part of the larger history of coal mining in Appalachia. New River coal contributed economically to the manufacture of low-cost iron and low-cost, high-quality metallurgical coke, and Kaymoor's history is an integral part of the Appalachian coal mining and cultural heritage.

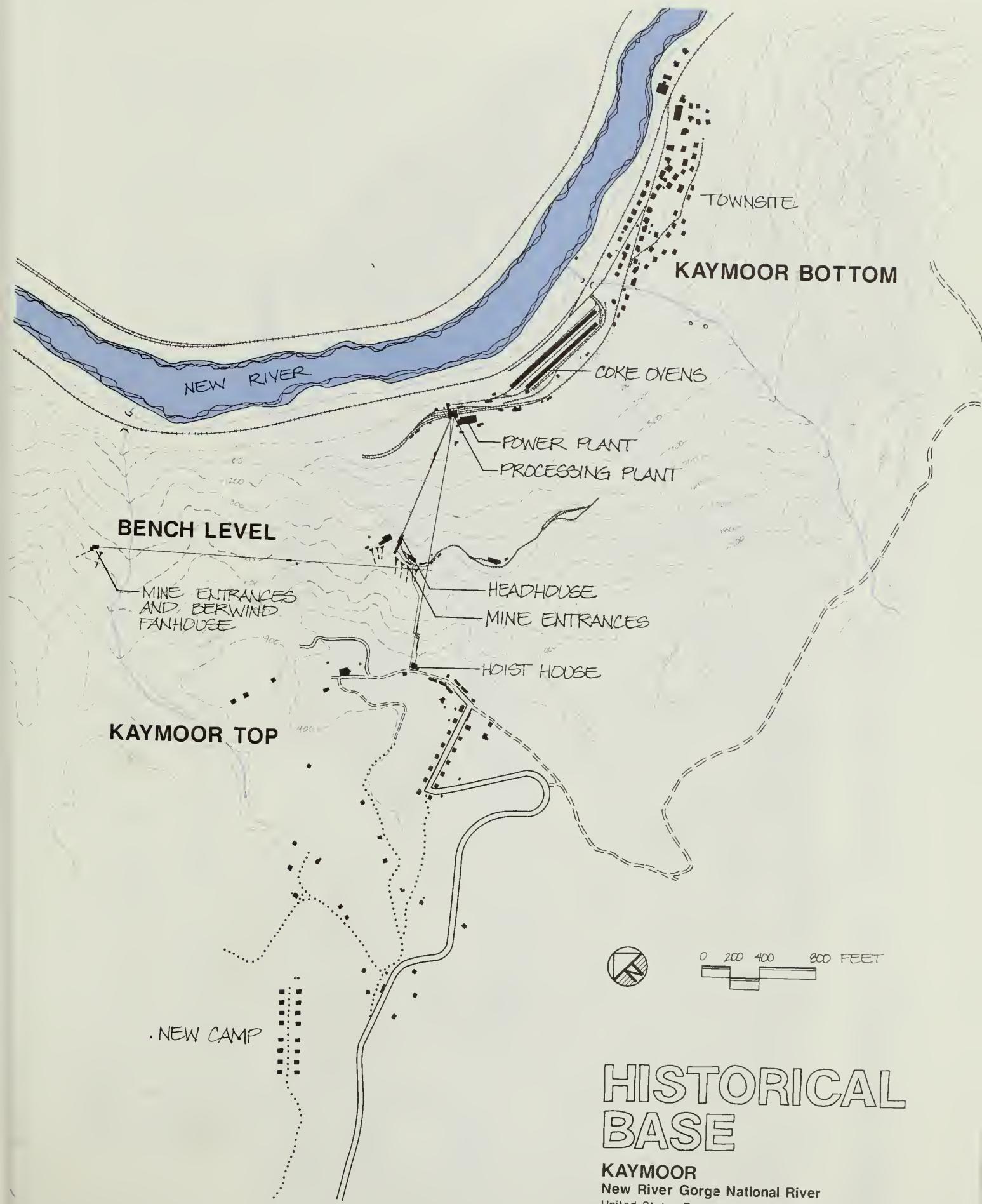
The importance of coal to the United States in the late 19th and early 20th century cannot be overstated; 75% of the energy used in this county in 1910 was supplied by coal. There was great interest in southern West Virginia's coal because of its low sulphur content and the high heat level it produced when burned. Mines were opened in the New River Gorge as early as the 1870s-1880s, but after 1900 West Virginia's coal industry boomed. Coal was shipped on the Chesapeake & Ohio (C&O) Railroad directly to east coast markets. The area's topography provided excellent conditions for low cost mining, and the importation of immigrants and southern blacks provided a low cost labor force. Kaymoor was only one of many mines to be opened up and down the New River Gorge. The Low Moor Iron Company of Low Moor, Virginia, opened Kaymoor in 1900, along with a companion coal mine, Kaymoor no. 2, in 1903.

Miners, equipment, and townspeople were transported from the company towns at the top and bottom of the gorge by a single-track incline with a steam-powered cable hoisting drum (known as a mountain haulage). Coal from the mine was lowered to the processing plant and beehive coke ovens near the railroad tracks at the bottom of the gorge on a two-track gravity incline. Both of these systems operated, with few modifications, from 1900 until 1962.

Kaymoor miners worked the mine in small rooms to pick and blast the Sewell seam coal face. The coal was moved from a drift opening to the railroad tracks through a highly organized route. When the coal was taken from the mine, it was taken to the headhouse, weighed, and dumped into a storage bin, where it was fed directly into the monitor cars through two chutes. The two-track gravity incline and two 8-ton monitor cars carried the coal down the slope. At the base of the monitor incline, the coal was discharged into a 100-ton capacity storage chute. A reciprocating feeder distributed the coal onto a horizontal conveyor that led into the processing plant installed in 1925.

Inside the plant the coal was either screened, or washed and then screened. The screening sorted the coal by size before it was loaded into railroad cars. When the Low Moor Iron Company owned Kaymoor, the finer coal was coked in the beehive coke ovens a short distance from the processing plant. After Kaymoor was purchased by the New River and Pocahontas Consolidated Coal Company, the beehive coke ovens were shut down and the coal was shipped by rail to customers.

Cokemaking began at Kaymoor soon after the mine opened. Two batteries of beehive ovens made of firebrick, totaling 202, were built. Each was a circular, vaulted chamber with a flat tile bottom. The ovens had an opening at the top and an arched door at the bottom. A fire was built inside the oven to heat the firebrick, and the coal was added at the top opening from a "larry" car, which ran on tracks on top of the ovens. The coal was then burned for 48 or 72 hours with low oxygen. Afterwards, workers opened the door, watered down the fire, and withdrew the brittle, grey coke. These ovens were closed in the mid-1930s.



HISTORICAL BASE

KAYMOOR

New River Gorge National River

United States Department of the Interior / National Park Service



KAYMOOR HISTORICAL PERSPECTIVE Circa 1925-1935

New River Gorge National River

United States Department of the Interior / National Park Service

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The coal town of Kaymoor consisted of two sections: Kaymoor top at the top of the New River Gorge and Kaymoor bottom at the bottom of the gorge next to the river and the south side main line of the C&O Railroad. The settlement of Kaymoor was an adaptation to the environment. The layout of mines and town in New River Gorge was dictated by geography, with mine workings and housing being placed as close as possible to the drift mouth wherever flat space existed. The railroad imposed a linear pattern to the settlement, which, in Kaymoor's case, was affected by the narrow valley and the riverfront. The gorge forced settlement into a linear pattern, although Kaymoor bottom was blessed with more level space than most West Virginia coal towns.

The first houses were constructed in Kaymoor in 1901, with others added in 1902 and 1905. An additional settlement, called New Camp or New Town, was built a short distance from Kaymoor top in 1918-19. Later construction has not been documented. In 1923, Kaymoor boasted 131 homes, all single-family dwellings. All of them were bungalow style, one-story, wood structures with four rooms and fireplaces or stoves, and were approximately 150 square feet in size. The outside finish of the houses was usually board-and-batten, but sometimes weather-board was used. The inside finish of most of the houses was wood sheath, while some had plastered lathe. Electricity was available in 78 of the houses; only 25 had inside running water. All of the houses had roofs of composition paper, rock post foundations, and a privy and coal shed but no cellars.

Residents were supplied with drinking water from hydrants, drilled wells, springs, and river water. These supply points serviced 106 houses. The remaining 25 had indoor plumbing. The sewage system consisted of surface privies for all the homes. The privies were not flyproof and had no covers or screens. Each family had its own privy anywhere from 20 to 100 feet from the house. Most garbage was given to the animals, and wastewater was thrown onto the ground or disposed of through piped drains.

The appearance of the community in 1923 personified the typical West Virginia coal town. There were no streetlights and no sidewalks, but hard paths led from house to house. Fences were around each house and were generally well kept, except in Kaymoor bottom. Most families grew gardens and kept chickens, pigs, and cows. There were no banks, churches, or saloons in Kaymoor top and bottom proper. A theater and a tennis court were at Kaymoor bottom along with other recreation facilities that included a ball field and pool hall. There was no union hall or other public hall. Two grade schools were at the top and two at the bottom. These were segregated schools for black and white students. The post office was located in the company store at Kaymoor bottom.

CURRENT APPEARANCE

Kaymoor bottom was abandoned in 1952 and the majority of residents moved out. In April 1960 most of the vacant structures were destroyed by fire, and most of the remaining houses were dismantled. Little remains at Kaymoor top, but comparable houses can be found at the New Camp, or at the town of Kaymoor coal mine no. 2, now part of Fayetteville. The Kaymoor bottom site is still intact and discernible, although it is overgrown with kudzu, brush, and trees. Only sections of several houses remain standing. Foundations of houses are visible with a few chimneys in ruins. The major ruin is company store no. 9 between the C&O Railroad tracks and the river. Although only a few structures remain at Kaymoor bottom, the site itself provides the feeling of a company town whose only access to the outside world was by way of the C&O Railroad tracks.

When Kaymoor was abandoned, the growth of trees and foliage altered the site's historical appearance. Its isolated location within the New River Gorge allowed the site to retain a high degree of integrity. Individual structures, however, rapidly disintegrated because of weather and exposure. Trees have now been removed and basic preservation measures implemented on the remaining

structures. It is no longer difficult to envision the mass and scale of the mine and its auxiliary buildings or comprehend the technological nature of the materials and workmanship involved with mining and processing of the Sewell seam smokeless coal.

The Kaymoor mine currently consists of an abandoned coal mine, associated extractive and processing machinery, and the site of the accompanying coal town. Kaymoor's major physical characteristics include mining machinery, buildings, and other features along the bench level. These features include openings in the gorge wall for electrical service and ventilation, fan houses, headhouse, three main drift openings, car repair shop, superintendent's office and lamphouse, powder house, and electrical repair shop. Between the bench level and Kaymoor bottom (at about a 30 degree slope) are the monitor tracks and conveyor system. Located at Kaymoor bottom are the processing plant, power house, two batteries of coke ovens, and railroad siding.

VISUAL RESOURCES

The Kaymoor area is one of the most remote and undeveloped stretches of the national river. The wild character of the river, the steep gorge walls, the vertical cliffs at the rim, and a blanket of thick deciduous vegetation are the outstanding scenic resources. When the trees have leaves, it is difficult to see most of the ruins from across the gorge. When the leaves are off the trees, visibility increases.

From the Mary Draper Ingles Trail, which runs through the site, the Kaymoor ruins on the bench level are highly visible throughout the year. The tipple is always highly visible from the river. The coke ovens and townsite are not visible from the river when the leaves are on the trees. The company store is always moderately visible from the river.

CLIMATE

The humid, continental climate is characterized by sharp temperature contrasts. Daytime temperatures range from lows in the 20s (F) in January to highs in the 80s (F) in July. About 45 inches of precipitation is evenly distributed throughout the year. The ridges receive more precipitation than low areas. Total snowfall is about 30 inches. Winter climate is relatively mild.

GEOLOGY

The New River flows northwest from its source in the Blue Ridge Mountains in North Carolina through a scenic gorge cut into the Allegheny Plateau on the west slope of the Appalachian Mountains. The New River is thought to be a remnant of the ancient Teays River, which appeared as the Appalachians were first uplifted at the close of the Paleozoic era and continued its downcutting action through the second Appalachian uplift at the end of the Mesozoic era. Geologists consider the New River to be the headwaters of the ancient Teays River and the oldest river system in North America.

In the study area the Pocahontas and overlying New River formations are exposed. Both formations are nonmarine, coal-bearing sequences of sandstone interbedded with siltstone, shale, and underclay of an early Pennsylvanian age (320-330 million years old). The New River formation contains the Sewell coal beds, the source of Kaymoor coal. The cliff-forming Nuttall Sandstone Member of the New River Formation caps the rim of the gorge in the Kaymoor area, forming a scenic sandstone wall popular with rock climbers.

The Sewell seam at Kaymoor contains premium grade coking coal, which is about 70% carbon and varies in height from 2 to 5 feet. The reserves of the Sewell bed are nearly mined out. There are no coal reserves in the study area. The closest large reserves are northwest of Fayetteville along Marr Branch about 2.5 miles from Kaymoor. These reserves are currently being mined by drift entries inside the boundary on the west bank of the river just downstream from the New River Bridge. The mine is not visible from the Kaymoor site. There is an "unsuitable for surface mining" buffer zone that extends 300 feet beyond the national river boundaries. The buffer zone applies to all public parks and was statutorily established by the Surface Mining and Control Reclamation Act of 1977.

There are no other known economically valuable metallic or nonmetallic minerals, oil, or gas in the Kaymoor area. A natural gas well drilled near the national river boundary at Kaymoor was dry. Commercial quality sandstone, shale, sand and gravel, and clay are as abundant or more abundant outside the study area.

TOPOGRAPHY/SOILS

The width of the gorge in the Kaymoor area varies between 0.5 and 0.8 mile wide at the rim and 0.1 mile wide at the river. The gorge drops steeply off the rim at a fairly constant slope down to the river, with slopes generally at a 40 percent grade or greater. The elevation is about 1,920 feet above sea level at Kaymoor top and about 900 feet at the river. The bench level where the mine drift opening and headhouse are located is at an elevation of about 1,450 feet. The processing plant is at about 1,000 feet in elevation. The coke ovens and abandoned townsite (Kaymoor bottom) are at 960 feet in elevation.

The Nuttall Sandstone outcropping lies about 100-150 feet down from the top; the cliff is about 30 to 40 feet tall on the Kaymoor side. On the rim of the gorge across the river from Kaymoor, the Nuttall Sandstone cliff extends for several miles and is known as the Endless Wall. The wall is about 80 to 100 feet high.

Soils in the Kaymoor area are dominated by the steep rock land-Dekalb-Gilpin association. On the foot slopes in the bottom of the gorge, the Ernest-Shelota association occurs in a strip on both sides of Craig Branch where the tipple, coke ovens, and the old Kaymoor townsite (Kaymoor bottom) are located.

Soil tests will be required before any planned construction. In general, very steep (40-70 percent) slopes in the Kaymoor area place severe limitations on development. Other potential limitations on development, particularly for the construction of sewage effluent disposal fields, include the presence of bedrock 2 to 3 feet below the surface (Dekalb-Gilpin soils) and a moderately slow permeability in combination with a seasonally high water table (Ernest soils). The soils have a moderate erosion hazard.

Most of the soils in the Kaymoor area are classified by the U.S. Department of Agriculture, Soil Conservation Service, as Dekalb-Gilpin very stony soils of 40 to 70 percent slopes. Both Dekalb and Gilpin soils are channery, e.g., the soils contain thin flat pieces of sandstone. Dekalb soils are moderately deep and well-drained, with a moderately coarse texture. They are formed in material weathered from acid sandstone. The soils have low to moderate available moisture capacity and rapid permeability. Gilpin soils are also moderately deep and well-drained, with a medium textured surface and a finer textured subsoil than Dekalb soils. These soils formed in material weathered from acid siltstone, shale, and soft sandstone. The Gilpin soils of this unit have a very stony surface layer. Ernest soils are deep and moderately well drained soils of the foot slopes. There is a firm subsoil layer through which water and air move slowly. Ernest soils formed in acid material that moved

downslope from the uplands (colluvial). The Ernest-Sheolecta soil in the study area is very stony silt loam of 20-40 percent slopes. The surface layer is very stony.

Steep rock land is the soil classification used to describe the very steep, massive outcropping sandstone ledges and vertical sandstone cliffs more than 10 feet high. Large boulders have accumulated at the base of many of the cliffs. This classification describes the Endless Wall across the gorge from Kaymoor, as well as the part of the Kaymoor area below the hoist house where the old stairway is located and the cliff below the stairway.

There are six mine dumps (refuse slides) at the Kaymoor site. The dumps are piles of waste from deep coal mines. They are a mixture of coal, slate, sandstone, and shale piled near mine openings. The mine dumps are capable of supporting only a low density of vegetation with a limited number of species. One dump at rim level has been regraded and revegetated and is now stable. Another dump on the outslope has revegetated and is also stable. Three dumps are partially vegetated and one dump near the bottom is not revegetated and eroding. Eroding refuse from the mine dumps is a potential environmental hazard.

There is no prime agricultural land within the Kaymoor area.

WATER RESOURCES/QUALITY

Tributary creeks of the New River on the west bank are Craig Branch upstream of Kaymoor and Butcher Branch and Wolf Creek downstream. Craig Branch flows into the New River by way of a large concrete culvert under the CSX railroad tracks between the coke ovens and the townsite. Wolf Creek is not in the immediate Kaymoor area. Fern Creek flows into the New River downstream of Kaymoor on the east bank of the river. There is some seepage from gated mine entrances on the bench level north of the main portion of the site. This seepage eventually drains into Butcher Branch. The eroding mine dumps and refuse piles drain into the river. It is not known whether there are hazardous materials present on the Kaymoor site that will adversely affect the water quality. A hazardous materials survey will be done at Kaymoor.

There is no water quality data for Craig Branch or the river in the vicinity of the Kaymoor area itself. Studies done in 1987 by the West Virginia Department of Natural Resources (WVDNR) showed the overall water quality of the New River at Thurmond (above study site) and Fayette station (below project site) to be in the good range. Tributaries generally had poorer overall water quality than the river, attesting to the dilution potential of the river.

FLOODPLAINS/WETLANDS

The majority of historic structures at Kaymoor lie above the 100-year floodplain and do not require special flood protection measures. The ruins of the company store lie on the riverbank and are within the 100-year floodplain. There are no wetlands, as identified by the U.S. Fish and Wildlife Service (USFWS), in the Kaymoor area; however, there are riparian zones adjacent to the New River, the Craig and Butcher branches, and Fern Creek.

VEGETATION

The New River functions as a migration corridor for plants because it is the only river flowing from southeast to northwest across the Appalachians. Hence, the flora is a combination of native and

introduced species, coastal plain and prairie species, and high and low altitude species mixed with the common plants of West Virginia.

Common trees include species of the red and white oak groups, red maple, black locust, basswood, tulip poplar, buckeye, beech, hickory, and eastern hemlock. Virginia pines and shortleaf pines are common on drier sites. Elm, silver maple, sycamore, and sweet gum species are common along the river edge. Paulownia, an introduced species valued for its wood, is common in some parts of the Kaymoor area. A variety of low trees and understory shrubs including dogwood, redbud, witch hazel, magnolia, persimmon, and rhododendron are also present. Poison ivy is abundant and nettles are present in the Kaymoor area.

Kudzu has completely covered the former housing area at Kaymoor bottom. Trees are growing inside the foundation walls.

CSX Transportation maintains a right-of-way through the Kaymoor area and controls vegetation through manual cutting and herbicide application. Herbicides are applied with equipment mounted on trains, using various combinations of 2,4-D, Roundup, Oust, Arsenal, and Karmex in mid-May and again in August if needed.

WILDLIFE

Common amphibian and reptile species in the Kaymoor area include the spring peeper, American toad, green frog, box turtle, stinkpot turtle, snapping turtle, copperhead, timber rattlesnake, and other nonpoisonous snakes. There are also numerous salamander species in the area.

The most common mammal species are the opossum, cottontail rabbit, deer mouse, eastern chipmunk, muskrat, groundhog, fox and gray squirrel, raccoon, mink, striped skunk, red and gray fox, and white-tailed deer.

Trapping is prohibited within the national river boundary. The area is open to hunting during seasons established by the WVDNR Wildlife Resources Division as follows:

- Late fall – white-tailed deer
- Mid-October through February – ruffed grouse
- November through February – bobwhite quail,
cottontail rabbit, and snowshoe hare
- October through January – squirrel
- April and May – turkey

The area is open to migratory bird hunting; mourning doves, Canada geese, and some species of ducks may be present in the Kaymoor vicinity during the appropriate seasons, which are generally between September and January. The Kaymoor area may be open to bear hunting some years.

The gorge may be divided into three general habitat types used by birds – riparian along the river, the upland slope covered by a second growth deciduous forest, and the drier rim area. The riparian zone is an important nesting area for songbirds. The New River is a corridor along which songbirds migrate; species present at Kaymoor vary with the season.

Representative bird species that occur at the Kaymoor site throughout the year are ruffed grouse, wild turkey, mourning dove, barred owl, red-bellied woodpecker, downy woodpecker, pileated woodpecker, blue jay, American crow, Carolina chickadee, tufted titmouse, white-breasted nuthatch,

Carolina wren, northern cardinal, song sparrow, and American goldfinch. An additional 51 species of birds are common at the Kaymoor site during at least two seasons.

The abandoned mine portals are potential habitat for bats, as well as known habitat for the eastern wood rat (*Neotoma floridana magister*), a federal candidate threatened/endangered species. Bat species known to use other mine portals within the New River boundaries include the eastern pipistrelle, little brown bat, and big brown bat. Portals in the Kaymoor area should be surveyed to identify whether the portals are used, when they are used, whether they are used for hibernacula or maternity roosts, and which species may be present. Five of the nine portal openings or mine entries have been gated to prevent human access, using a gate design that allows passage by bats and small animals up to the size of foxes and raccoons. The other four entries have been sealed.

SPECIES OF SPECIAL CONCERN

Although not officially listed by any agency as threatened or endangered, several animal species may be present in Kaymoor that require special consideration because of their rarity. The Kaymoor area should be surveyed for these sensitive species, and, if present, measures will be taken to protect them from any adverse impacts.

Two animal species that might occur in the Kaymoor area were formerly listed by the USFWS as category 2 candidate threatened and endangered species but have since been removed from the candidate list. (A category 2 candidate species is one for which there is information indicating that the species could possibly be threatened or endangered but for which substantial data on vulnerability or threat is lacking.) Both the Appalachian population of the green salamander (*Aneides aeneus*) and the northern long-eared bat (*Myotis septentrionalis*) are now listed only as category 3 species, meaning the species is no longer being considered for listing as threatened or endangered. The northern long-eared bat may use the abandoned mine portals. The green salamander, listed as rare by the WVDNR Natural Heritage Program, typically occurs in rock crevice habitats and is fairly common at some mine entrances in eastern Kentucky.

Two other amphibians and a reptile that occur in the Kaymoor area are species of special concern to the WVDNR: the black-bellied salamander (*Desmognathus quadramaculatus*), the Jefferson salamander (*Ambystoma jeffersonianum*), and the broadhead skink (*Eumeces laticeps*). Information on these species and the green salamander was collected in the summer of 1989 as part of the "Upland Vertebrate Survey." Since publication of the draft DCA/EA, a new state species of special concern—the cave salamander (*Eurycea lucifuga*)—has been documented within New River Gorge National River and may be present in the existing portals at Kaymoor. Any change to those portals will affect this species.

Black bear, currently increasing in population, use the Kaymoor area but are not commonly seen. The Kaymoor area (Fayette County) may be closed to bear hunting at the discretion of the WVDNR.

The eastern subspecies of wild turkey (*Meleagris gallopavo*), which may occur in all habitats at Kaymoor, are rapidly increasing. Park staff have observed turkeys on the rim of the gorge opposite Kaymoor but not at Kaymoor itself. Ruffed grouse, another upland game species open to hunting, have been seen at Kaymoor.

A sedge (*Carex umbellata*) occurs north of Kaymoor on rock outcrops at Long Point on Wolf Creek. This species is classified by the WVDNR Natural Heritage Program as an uncommon or rare species in the state. Rare plant surveys by the park staff indicate that there are no other rare plants in the Kaymoor area.

THREATENED AND ENDANGERED SPECIES

The state of West Virginia does not have threatened and endangered species legislation that accords listed species legally protected status. However, NPS policy does take into account any state species of special concern and treats such species as it would federally listed species.

There are no federally listed, proposed, or candidate threatened or endangered species of plants or animals known to occur at the Kaymoor site, nor is there any designated critical habitat for any threatened or endangered species. However, detailed surveys should be made and appropriate habitats searched for presence of threatened or endangered species prior to implementation of any proposed actions described here.

The WVDNR in conjunction with the USFWS has an active program to reintroduce the peregrine falcon (*Falco peregrinus*), a federally listed endangered species, into New River Gorge. There is a hacking site across the gorge from Kaymoor, which is active between May and September. The gorge has excellent peregrine habitat. It provides cliffs, nearby water, and a good population of birds for a food source.

Abandoned mines in Kentucky and Tennessee are habitat for two species of federally listed endangered bats, the Indiana bat (*Myotis sodalis*) and the Virginia big-eared bat (*Plecotus townsendii virginianus*). Although neither species has been seen using the Kaymoor mine, the migratory habits of the bats do not preclude their occasional presence. Five drift openings have been fitted with bat gates that offer protection against vandalism and disturbance, the two major causes of decline for these species. The Virginia big-eared bat is more of a cave dweller than the Indiana bat, which prefers to roost under tree bark during the summer. Critical uses of the mines by these (and other nonendangered) bats will be as maternity colonies or hibernation sites, although summer roosts are equally critical for the endangered bat species.

Three other category 2 threatened and endangered animal species that could potentially occur in the Kaymoor mines include the Eastern small-footed bat (*Myotis leibii*), Rafinesque's (southeastern) big-eared bat (*Plecotus rafinesquii*), and the eastern wood rat (*Neotoma floridana magister*). The latter species may actually be locally common at Kaymoor, but should be afforded maximum protection due to its candidate status.

The park has done a rare plant survey of the Kaymoor area. No rare, threatened, or endangered plant species were found or are known to occur in the project area.

EXISTING DEVELOPMENT

The only currently existing development in the Kaymoor area is the Mary Draper Ingles Trail, which follows the bench level in the immediate Kaymoor area. This segment of the trail is a portion of a much larger trail being developed by local trail associations from its beginning in Ohio to its conclusion in North Carolina. This is currently the source of most of the site's visitation. Just how many of the hikers along the trail take time to see the rest of Kaymoor, not visible from the bench trail, is unknown.

VISITOR USE

Annual visitation at New River Gorge National River totals approximately 400,000, but is expected to increase dramatically since the Canyon Rim visitor center has been opened to the public and Grand View State Park has been acquired. Visitation at Kaymoor is almost exclusively confined to those entering by way of the Mary Draper Ingles Trail. The National Park Service does not keep figures for visitor use of the Mary Draper Ingles Trail so the exact number of visitors who leave the trail to explore the site is not known. The Park Service has, however, made some projections for visitation at Kaymoor following proposed site development described in this document.

It is assumed that most visitation will occur from the parking area at Kaymoor top. Considerable numbers of people could enter from the river, but because of the minimal time they will be allowed to spend at the site, it is unlikely that Kaymoor will be more than a place for a short rest before finishing the raft trip down the river.

It is also assumed that the season will last from approximately April 15 to November 15 and that use beyond this time frame will be negligible. Heaviest use will occur on weekends. Peak use will equal approximately four weeks and could coincide with the enjoyment of the fall colors.

Using the assumptions above, the Park Service has projected a need for a parking area at Kaymoor top of 25 vehicles. Site use for that seven-month period could range from a low of 5,800 to a high of 10,800 visitors annually.

Interpretation of the natural and cultural resources of the site will rely heavily on wayside exhibits, maps, a site bulletin, a guidebook/booklet, and possibly audio headsets rented at the Canyon Rim visitor center. Occasional guided tours will be given during the peak season as is currently done.

DEVELOPMENT CONCEPT

This final DCP describes a program of development and interpretation for the Kaymoor Mine site at New River Gorge National River. The proposed action is in keeping with that described in the 1982 GMP.

DESCRIPTION

Preservation Emphasis

Stabilization as a ruin in present condition.

Visitor Experience Emphasis

A physically demanding and intellectually challenging experience that evokes awareness of the difficult challenges this setting imposed on those who worked and lived here.

Objectives

Cultural Resources

To stabilize selected facades in roughly their current (but more visible) condition.

Natural Resources

To minimize adverse impacts and provide maximum protection for native vegetation and wildlife.

To protect potential bat habitat in the Kaymoor area.

Public Safety

To provide a safe experience for all visitors free from the dangers associated with hunting, the active railroad, and the site's unsafe historic remains and natural hazards.

Access

To provide able-bodied visitors with the opportunity to explore the entire Kaymoor site on foot, with access from Kaymoor top, the Mary Draper Ingles Trail, and the river.

To improve the road to Kaymoor top from Salem-Gatewood Road.

To provide safe pedestrian access between Kaymoor bottom and the New River.

To provide road access from Kaymoor top to bench level for preservation, operations, and maintenance activities.

Interpretation

To allow visitors to come away with an understanding of the physical difficulties of mining coal and living in the New River Gorge.

Vandalism

To prevent the removal of historic artifacts and damage to historic features from acts of vandalism.

HOIST HOUSE —
HISTORIC STAIRS —
PROPOSED TRAIL —
POWDER HOUSE &
CAP HOUSE —
KAY

MARY INGLES TRAIL
(MAINTENANCE ACCESS ROAD)

KAYMOOR BOTTOM

TOWNSITE

CRAIG BRANCH
CULVERT

PROPOSED
TRAIL

COKE OVENS

BOAT LANDING

NEW



PROPOSED ACTION

Preservation Treatment

Stabilize structures for public safety throughout the site (all levels).

Specific Structures to be Stabilized:

Kaymoor Top

hoist house

stairs

Bench Level

haulage rails

main drift entries near headhouse

headhouse

drift openings near Butcher Branch
superintendent's office/lamphouse

Low Moor fan house

car repair shop

powder house

cap magazine house

monitor

water tank

Mid-Level (Slope)

cap house (near haulage tracks)

two monitors (fix in place on monitor tracks)

monitor incline system

conveyor system

Bottom Level

processing plant

sand house and sand car

power house

coke ovens

railroad siding to processing plant and coke ovens

haulage car (relocate to Kaymoor top for display at hoist house)

company store ruins

Other structures not listed are to be left in situ and allowed to deteriorate if they are not hazardous to visitors. Small artifacts determined to qualify for the park's collection will be retrieved for storage (location to be determined). Site clutter will be retained if not hazardous to visitors. Vegetation that threatens stability of ruins and obstructs close-up visibility will be removed and a clearance program maintained.

Public Safety

Conduct a toxic materials survey and clean up site as necessary to ensure public safety.

Fence the CSX Railroad right-of-way as required to prevent visitor trespass in Kaymoor area (5,000 l.f.).

Work with WVDNR to establish a hunting safe zone.

Access

Improve the access road from the Gatewood Road (Route 9) to a new trailhead facility at Kaymoor top with parking for 25 vehicles.

Improve maintenance vehicle access road to bench level.

Construct maintenance vehicle access trail from bench level to bottom.

Recondition the historic stairs from Kaymoor top to bench level, build new stairs parallel to extant haulage tracks to Kaymoor bottom, and/or provide trail options to all three levels.

Retain secondary access to Kaymoor at bench level by way of the Mary Draper Ingles Trail.

Provide river access by establishing boat take-out at Craig Branch and construct trail access to Kaymoor via culvert under the railroad (if CSX permits).

Interpretation

Coal mining process – waysides with some HAER drawings, quotations, mine maps, guidebook.

Coal mining at Kaymoor – 20-minute film shown at Canyon Rim visitor center.

Geography/lifestyle – waysides with some historic photos, quotations, mine maps, guidebook.

Visitor Facilities

Provide restrooms and site orientation wayside at Kaymoor top trailhead.

Provide portable toilet facilities at mid level and bottom.

Land Protection

Acquire acreage needed for trailhead site and access rights.

INTERPRETATION

Interpretation of the mines and ancillary facilities will rely heavily on a site guidebook for the history of Kaymoor and for site orientation. Wayside exhibits will provide specific information on the structures and their functions. During the heaviest visitor season, a ranger will be available on the site to provide visitor assistance and to conduct occasional guided tours of the site. The interpretation, whether provided by the guidebook or by a ranger, must entice the visitor to leave whatever level he or she entered on and to visit the other levels of the site where very different kinds of structures and parts of the Kaymoor story will be interpreted. Because each of the levels tells a different part of the Kaymoor story, each level can be described with regard to the activities that occurred there without affecting the "sequence" of the story.

There are three points of entry for visitors to the Kaymoor site: from the Gatewood Road at Kaymoor top, from the river, and from the Mary Ingles Trail at the bench level.

For visitors entering from Kaymoor top, the interpretation will begin with the story of Kaymoor's management. The mine's management lived at Kaymoor top or "New Camp" for most of its history while the miners lived in the valley below at Kaymoor bottom. The lives of the men and women inhabiting Kaymoor top were very different from those of the miner's families. The guidebook, wayside exhibits, and occasional interpretive walks will flesh out these differences.

Management traveled down to the bench and bottom levels by way of the "haulage," a railed conveyance similar to a funicular but unique to Kaymoor. Although not reconstructed, portions of the haulage still exist and will be interpreted at waysides at the hoist house at Kaymoor top and along the trail down.

From the hoist house, the visitor will take the trail to the bench level. At various sites along the trail, benches will be provided to allow short rests along the steep trail and to allow the visitor to read from the site guidebook or wayside exhibits. At the bench level, the visitor will see the mines, the headhouse, fan houses, and the other structures associated with the mining of the coal. Waysides and descriptions in the guidebook will explain the function of each structure and describe how the mining was accomplished.

Then, the visitor will go on down to Kaymoor bottom to learn about the processing of the coal, the logistics of the transportation of the coal from the valley, and the everyday life of the miners who worked and lived in the valley.

The story will be reversed for those visitors entering from the river. Their experience will follow that of the miners who lived in the valley and who traveled up to the mines and, occasionally, on up to the outside world.

Visitors entering the site from the Mary Draper Ingles Trail will begin at the mines and structures at the bench level and then choose between walking up to the hoist house or down to Kaymoor bottom. They would begin at the mines and learn how the coal was worked and transported down to Kaymoor bottom.

The visitor should come away with an understanding of the isolation in which Kaymoor existed, the sophisticated technology which made it feasible to mine such a difficult location, the transportation system required to haul the coal to markets on the east coast, and something about the way of life of the peoples who made Kaymoor a successful operation for approximately 60 years.

COST ESTIMATES AND STAFFING REQUIREMENTS

NOTE: The costs given here are Class C estimates.

DEVELOPMENT ITEM AND QUANTITY	GROSS CONSTRUCTION ESTIMATE	CONSTRUCTION PLANNING ESTIMATE	TOTAL COST ESTIMATE
<u>Roads and Parking</u>			
Improve vehicle access to Kaymoor top:			
Gatewood Road (1.25 mi)	\$1,146,000	\$228,000	\$1,374,000
Parking for 25 vehicles	34,000	7,000	41,000
Improve vehicle access - top to bench level (4.5 mi)	590,000	117,000	707,000
Emergency vehicle access to bottom (helipad)	25,000	5,000	30,000
Helicopter services	--	--	<u>100,000</u>
Subtotal			<u>\$2,252,000</u>
<u>Trails</u>			
Repair stairs and handrail - top to bench level	\$102,000	\$21,000	\$ 123,000
New stairs - bench level to bottom (1,166 lf)	115,000	23,000	138,000
New maintenance vehicle access – bench level to bottom	100,000	20,000	120,000
Pedestrian access - Craig Branch culvert	26,000	6,000	32,000
Foot trails (.6 mi)	36,000	8,000	<u>44,000</u>
Subtotal			<u>\$ 457,000</u>
<u>Boat Landing Along River</u>			
Vegetation clearing (1 acre)	\$12,000	\$3,000	\$ 15,000
Beach grading	7,000	2,000	<u>9,000</u>
Subtotal			<u>\$ 24,000</u>
<u>Vegetation Clearing</u>			
Selective (15 acres)	\$235,000	\$59,000	\$ 294,000
<u>Site Structures</u>			
Restrooms – Kaymoor top	\$164,000	\$33,000	\$ 197,000
Utilities:			
Electrical	20,000	4,000	24,000
Water well	40,000	8,000	48,000
Sewer/septic	30,000	6,000	<u>36,000</u>
Subtotal			<u>\$ 305,000</u>
<u>Storage Structures</u>			
Bench level	--	--	\$ 10,000
Kaymoor top	--	--	<u>10,000</u>
Subtotal			<u>\$ 20,000</u>

DEVELOPMENT ITEM AND QUANTITY	GROSS CONSTRUCTION ESTIMATE	CONSTRUCTION PLANNING ESTIMATE	TOTAL COST ESTIMATE
<u>Interpretation</u>			
Wayside exhibits - top, bench, bottom	\$108,000	\$22,000	\$ 130,000
Kaymoor guidebook	--	--	50,000
Film on Kaymoor coal mining	--	--	<u>220,000</u>
Subtotal			\$ 400,000
<u>Public Safety</u>			
Fence railroad right-of-way (5,000 lf)	\$158,000	\$32,000	\$ 190,000
Toxic materials survey	10,000	2,000	<u>12,000</u>
Subtotal			\$ 202,000
<u>Stabilization of Structures</u>			
Kaymoor Top:			
Hoist house - cleanup and repair	\$32,000	\$6,000	\$ 39,000
Erosion control; drainage	8,000	2,000	10,000
Foundation/wall work, barricade doors, etc.	16,000	4,000	<u>20,000</u>
Subtotal			\$ 69,000
Bench Level:			
Haulage rail stabilization	\$ 7,000	\$2,000	\$ 9,000
Erosion control	12,000	3,000	15,000
Main drift entries near headhouse	20,000	4,000	24,000
Secure drift openings near Butcher Branch	11,000	3,000	14,000
Superintendent office/lamphouse	8,000	2,000	10,000
Low Moor fan house work	8,000	2,000	10,000
Car repair shop access/walls	8,000	2,000	10,000
Powder house painting/repair	4,000	1,000	5,000
Replace cap magazine house roof	1,600	400	2,000
Monitor - remove unsafe rails	8,000	2,000	10,000
Water tank - improve access; clean up	5,000	1,000	<u>6,000</u>
Subtotal			\$ 115,000
Mid-Level (Slope):			
Cap house near haulage tracks	\$ 2,500	\$ 500	\$ 3,000
Monitor incline system - fix two monitors in place	1,600	400	2,000
Remove/reconstruct rails	13,000	3,000	16,000
Remove collapsed structures	1,600	400	<u>2,000</u>
Subtotal			\$ 23,000

DEVELOPMENT ITEM AND QUANTITY	GROSS CONSTRUCTION ESTIMATE	CONSTRUCTION PLANNING ESTIMATE	TOTAL COST ESTIMATE
Bottom Level:			
Processing plant - stabilization			
Remove columns/beams	\$79,000	\$16,000	\$ 95,000
Wall siding panels	7,500	1,500	9,000
Repair/replace roof	26,000	6,000	32,000
Install security fence	53,000	10,000	63,000
Secure doorways/windows	13,000	3,000	16,000
Sand house and sand car work	5,000	1,000	6,000
Power house work	68,000	14,000	82,000
Coke ovens			
Tree/stump removal	63,000	12,000	75,000
Erosion control	6,000	1,000	7,000
Fill in coke ovens*	13,000	3,000	16,000
Reconstruct 6.7 mi of railroad siding & 2 trestles	657,000	131,000	788,000
Relocate haulage car	1,600	400	2,000
Company store ruins	13,000	3,000	<u>16,000</u>
Subtotal			\$1,207,000
Crane rental for bench level and bottom level	\$120,000	\$24,000	<u>\$ 144,000</u>
Total Development			\$5,512,000

* If a representative sample of stable ovens can be identified, the park will have the option of leaving them open for interpretive purposes.

MAINTENANCE ITEM	TOTAL COST ESTIMATE
Vegetation control around historic ruins and along 1 mile of fence	
1 Maintenance worker (WG-5)	\$ 32,000
Supplies and materials	<u>5,000</u>
Subtotal	\$ 37,000
Orientation center and restroom, Kaymoor top	
1 Maintenance worker (WG-5)	\$ 32,000
Supplies and materials	<u>10,000</u>
Subtotal	\$ 42,000
Road maintenance	
Part-time engineering equipment operator, part-time maintenance worker, and supplies and materials	\$ 44,000
Vehicles	<u>\$ 9,000</u>
Total Annual Maintenance	\$132,000

STAFFING REQUIREMENTS

Protection Division

Safety, protection, traffic control, law enforcement

Top (0.8 MY)

Safety, protection, law enforcement, EMS/SAR

Mid-level (0.8 MY)

Bottom (0.8 MY)

Natural Resources Division

No staffing required

Interpretation Division

Guided interpretive walks to bench level and possibly bottom level during visitor season

Roving contact Thursday through Tuesday – GS-5 minimum (2.2 MY)

Curatorial management artifacts – permanent GS-5/7 museum technician (1.0 MY)

IMPLEMENTATION SCHEDULE

<u>Action</u>	<u>Initial Work</u>	<u>Future Work</u>
Complete archeological studies	X	
Complete toxic materials survey	X	
Clear vegetation	X	
Fence railroad right-of-way	X	
Improve maintenance vehicle access to bench level from top	X	
Construct maintenance vehicle access trail from bench level to bottom	X	
Improve access road from Gatewood Road (Rt. 9) to trailhead and parking at Kaymoor top	X	
Acquire acreage at Kaymoor top	X	
Establish access to Kaymoor bottom level either by rail or helicopter	X	
Stabilize site structures	X	
Construct parking at Kaymoor top		X
Install site utilities		X
Construct restroom facilities at Kaymoor top		X
Upgrade pedestrian access from Kaymoor top to bottom level		X
Provide access from river		X
Install exhibits		X
Provide site guidebook		X
Plan and produce film on Kaymoor coal mining for showing at Canyon Rim visitor center		X

APPENDIXES

APPENDIX A: SUMMARY OF PUBLIC INVOLVEMENT

The *Draft Study of Development Concept Alternatives/Environmental Assessment* was placed on public review from November 29 to December 28, 1990. Approximately 200 copies were mailed to officials, groups, and individuals on the park's mailing list, and copies were made available for examination and/or pickup at the park headquarters and were also available for review at local libraries. Comments were accepted on the draft study through January 25, 1991, because of the concern regarding this project on the part of various groups.

Also during the review period, a public meeting was held in Fayetteville, West Virginia, on December 13, 1990. A news release outlining the alternatives was sent to newspapers, radio, and TV stations in the immediate area of the park concerning the public meeting on December 13. A total of 57 people attended the meeting: five outfitters, two representatives of the state historic preservation officer, one representative of the Region 4 Planning and Development Council, two reporters, one representative of the Fayette County Chamber of Commerce, one representative of West Virginia University, one state delegate, four park employees, and 41 individuals.

Comments made at the meeting indicated a wide difference of opinion regarding alternatives. People either liked the proposal or felt it was too environmentally damaging. The main topic of concern at the public meeting was the visitor transport system outlined in alternative 1. There was much concern expressed about the environmental damage it will cause. Other concerns expressed were project costs, effects on the peregrine falcon (alternative 3), and easy access for the elderly and visitors with disabilities. Overall, it appeared that the conflict lay between those who would develop the Kaymoor mine for historic and economic benefit and those who would like to keep the gorge in as natural a state as possible.

Of the 23 written responses received, no federal agencies responded. Two state agencies, one state legislator, one county chamber of commerce, two commercial outfitters, two corporate/business, one trail club, and fourteen private individuals responded.

Nine respondents supported alternative 1; one respondent supported alternative 1 without the visitor transport system. Two respondents preferred either alternative 2 or 3. Three respondents did not voice a preference. Four respondents did not voice a preferred alternative but were against alternative 1. Two respondents were against alternative 1 and provided their own alternative. One respondent voiced no preferred alternative but was against a visitor transport system and use of the Fern Creek Buttress. One respondent, representing a club, said the club could not decide between alternative 2 and alternative 4.

APPENDIX B: SURVEY NEEDS

ARCHEOLOGICAL

Archeological evaluation of the site, testing, and possible mitigation will be required prior to implementation of the proposed development. At the same time, all significant artifacts associated with Kaymoor that remain on-site must be cataloged and removed from the site, or, if they are to remain on-site, cataloged and protected during construction.

TOPOGRAPHIC

A topographic survey will be required for all areas of the site prior to preliminary design. All survey work should identify natural features, rocks, vegetation, and water courses.

SOILS AND ENGINEERING ANALYSIS

A detailed engineering and site-specific analysis of possible water sources and methods of wastewater disposal at Kaymoor top will be needed. This study should estimate probable flow generated by the proposed comfort station to adequately size an on-site disposal system. The study should consider soil suitability for on-site disposal and undertake site-specific percolation tests and soils investigations where necessary. A life-cycle cost analysis should be prepared to compare capital cost to operating and maintenance cost over the expected life of the system.

APPENDIX C: FINDING OF NO SIGNIFICANT IMPACT

Kaymoor
New River Gorge National River
West Virginia

INTRODUCTION

The National Park Service has prepared a *Study of Development Concept Alternatives/Environmental Assessment* (DCA/EA) to explore ways to protect and interpret the remains of Kaymoor, a coal mine and townsite in the New River Gorge. The DCA/EA described and examined the environmental consequences of four alternatives to accomplish these goals, including a no action alternative. The DCA/EA was distributed for public review on November 26, 1990. This Finding of No Significant Impact should be attached to the final *Development Concept Plan*.

SUMMARY OF PUBLIC REVIEW AND COMMENTS

During the 30-day public review of the Kaymoor DCA/EA, 23 written comments were received. The Fayette County Chamber of Commerce, Dragan Diversified, Inc., the Merchants and Miners Bank, State Representative Tom Louisos, and five private citizens supported alternative 1, the NPS preferred alternative. The West Virginia state historic preservation officer (SHPO), North American River Runners, Inc., the Kay Company, the West Virginia Chapter of the Sierra Club, the Mary Ingles chapter of the West Virginia Scenic Trails Association, and seven private citizens opposed alternative 1. Comments from the West Virginia Department of Natural Resources (WVDNR) and one private citizen did not express support for or rejection of any specific alternative. Based on the written public comments and a public hearing held on December 13, 1990, the National Park Service changed its preferred alternative from alternative 1 to alternative 2. Public comments favored a means of visitor access less intrusive to the natural scene and historic integrity of the site than the mechanical transport system proposed in alternative 1. In addition, the SHPO encouraged stabilization rather than restoration of the structures as proposed in alternative 1. Refer to the final DCP and the draft DCA/EA for a complete description of the proposal and the alternatives and the reasons for selecting a new preferred alternative.

ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

Kaymoor is listed on the National Register of Historic Places. The mine has been documented through drawings, photographs, and a history by the Historic American Engineering Record. A historic resource study for Kaymoor has also been completed. An archeological inventory and evaluation of the site will be programmed prior to plan implementation. The proposed action for preservation of the site and stabilization to halt further deterioration will constitute an effect on the historic properties but not an adverse effect. The SHPO has been consulted and agrees with this determination. Further consultation with the SHPO will be required prior to implementation of plan actions, as noted in appendix D of the *Development Concept Plan* for Kaymoor.

A boat take-out at Craig Branch will be constructed to provide access to the site from the river during rafting season. The boat take-out will be located at the river's edge in the 100-year floodplain. No Statements of Findings will be prepared for this project as construction of the boat take-out is a water-dependent action and is therefore excepted from compliance with Executive Order 11988 ("Floodplain Management") and Executive Order 11990 ("Protection of Wetlands"). There will be no other permanent adverse impacts on the floodplain or on any other wetlands. Impacts on riparian vegetation will be minimized.

It is anticipated that a permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act will be required for construction of the take-out.

Prior to implementation, a field review with the WVDNR nonpoint source coordinator will be conducted to determine whether a sediment and erosion control plan is required for the protection of water quality.

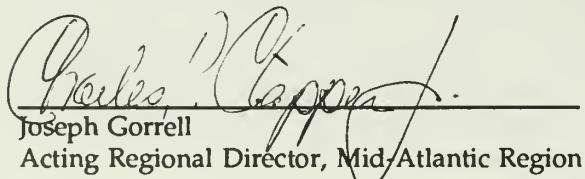
Trail access to Kaymoor from the proposed boat access will be constructed via the Craig Branch culvert under the railroad if CSX Railroad permits.

The WVDNR commented that the use of lead hunting shot would not cause any problems in the Kaymoor area. The WVDNR District IV Wildlife and Law Enforcement Section will be consulted to determine whether a hunting safety zone should be established and what size would be appropriate.

Craig Branch will be surveyed for the presence of a state-listed sensitive amphibian species (black-bellied salamander) prior to construction of a river-access trail. Mitigation methods will be determined in consultation with the WVDNR if salamanders are located within the project boundary. There will be no impacts on federally listed, proposed, or candidate threatened or endangered plant or animal species.

CONCLUSION

It is the National Park Service's determination that the preferred alternative is not a major federal action significantly affecting the quality of the human environment as defined in section 102(2)(c) of the National Environmental Policy Act of 1969 (Public Law 91-190, 83 Stat. 953), nor is the proposed action without precedent or similar to one that normally requires an environmental impact statement. Therefore, an environmental impact statement will not be prepared.



Joseph Gorrell
Acting Regional Director, Mid-Atlantic Region



6/3/92
Date

APPENDIX D: SECTION 106 COMPLIANCE REQUIREMENTS

The actions listed below that require further SHPO/ACHP review will be submitted for review and concurrence under the requirements of section 106 of the National Historic Preservation Act of 1966, as amended, and the programmatic agreement among the National Conference of State Historic Preservation Officers, the Advisory Council on Historic Preservation, and the National Park Service.

<u>Actions</u>	<u>Compliance Requirements</u>
Stabilize the following structures:	Requires further SHPO/ACHP review (all structures)
Kaymoor Top Hoist House Stairs Bench Level Haulage rails Main drift entries near headhouse Headhouse Drift openings near Butcher Branch Superintendents office/lamphouse Low Moor fan house Car repair shop Powder house Cap magazine house Monitor Water tank Mid-Level (slope) Cap house (near haulage tracks) Two monitors (fix in place on monitor tracks) Monitor incline system Conveyor system	
Bottom Level Processing plant Sand house and sand car Power house Coke ovens Railroad siding and trestles to processing plant and coke ovens Haulage car (relocate to Kaymoor top for display at hoist house) Company store ruins	
Allow other structures to deteriorate unless they become a safety hazard	Requires further SHPO/ACHP review
Remove vegetation affecting stability of structures or obstructing close-up visibility	Programmatic exclusion (b)
Site cleanup (includes removal of historic items lying around the site; some historically significant, others perhaps not)	Requires further SHPO/ACHP review

Toxic materials survey	Programmatic exclusion (j)
Fence CSX right-of-way	Requires further SHPO/ ACHP review
Acquire land at Kaymoor top	Programmatic exclusion (e)
Improve access to Kaymoor top from Gatewood Road	Requires further SHPO/ ACHP review
Construct parking area for 25 vehicles at Kaymoor top	Requires further SHPO/ ACHP review
Construct restroom facilities at Kaymoor top, including utilities	Requires further SHPO/ ACHP review
Improve maintenance vehicle access road from top to bench level	Requires further SHPO/ ACHP review
Construct maintenance vehicle access trail from bench level to bottom	Requires further SHPO/ ACHP review
Recondition remaining stairs from Kaymoor top to bench level and construct trail where stairs no longer exist	Requires further SHPO/ ACHP review
Construct trail or stairs from bench level to bottom paralleling haulage	Requires further SHPO/ ACHP review
Provide river access through culvert with stairs or trail to site	Requires further SHPO/ ACHP review
Clear vegetation and grade beach for river access	Requires further SHPO/ ACHP review
Install wayside interpretive/orientation exhibits	Requires further SHPO/ ACHP review
Construct helipad for construction access and later emergency use	Requires further SHPO/ ACHP review
Construct railroad siding and unloading dock	Requires further SHPO/ ACHP review
Install wayside exhibits	Programmatic exclusion (l)

SHPO = State Historic Preservation Officer

ACHP = Advisory Council on Historic Preservation

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STUDY PARTICIPANTS

DENVER SERVICE CENTER

Craig Cellar, Team Captain/Cultural Resource Specialist
Sharon Brown, Historian
Aida Parkinson, Natural Resource Specialist
Dennis Piper, Former Team Captain
Lew Gridley, Civil Engineer
Rob Ryan, Landscape Architect

NEW RIVER GORGE NATIONAL RIVER

Joe Kennedy, Superintendent
Henry Law, Assistant Superintendent
Andy Kardos, Former Chief of Interpretation
Mike Hunter, Former Chief of Maintenance
Meg Weesner, Natural Resource Specialist
Lizzie Watts, North District Interpreter
Rick Brown, North District Ranger
Leon Clifford, Park Planner (DSC)
Ron Gibbs, Cultural Resource Specialist (deceased)



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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